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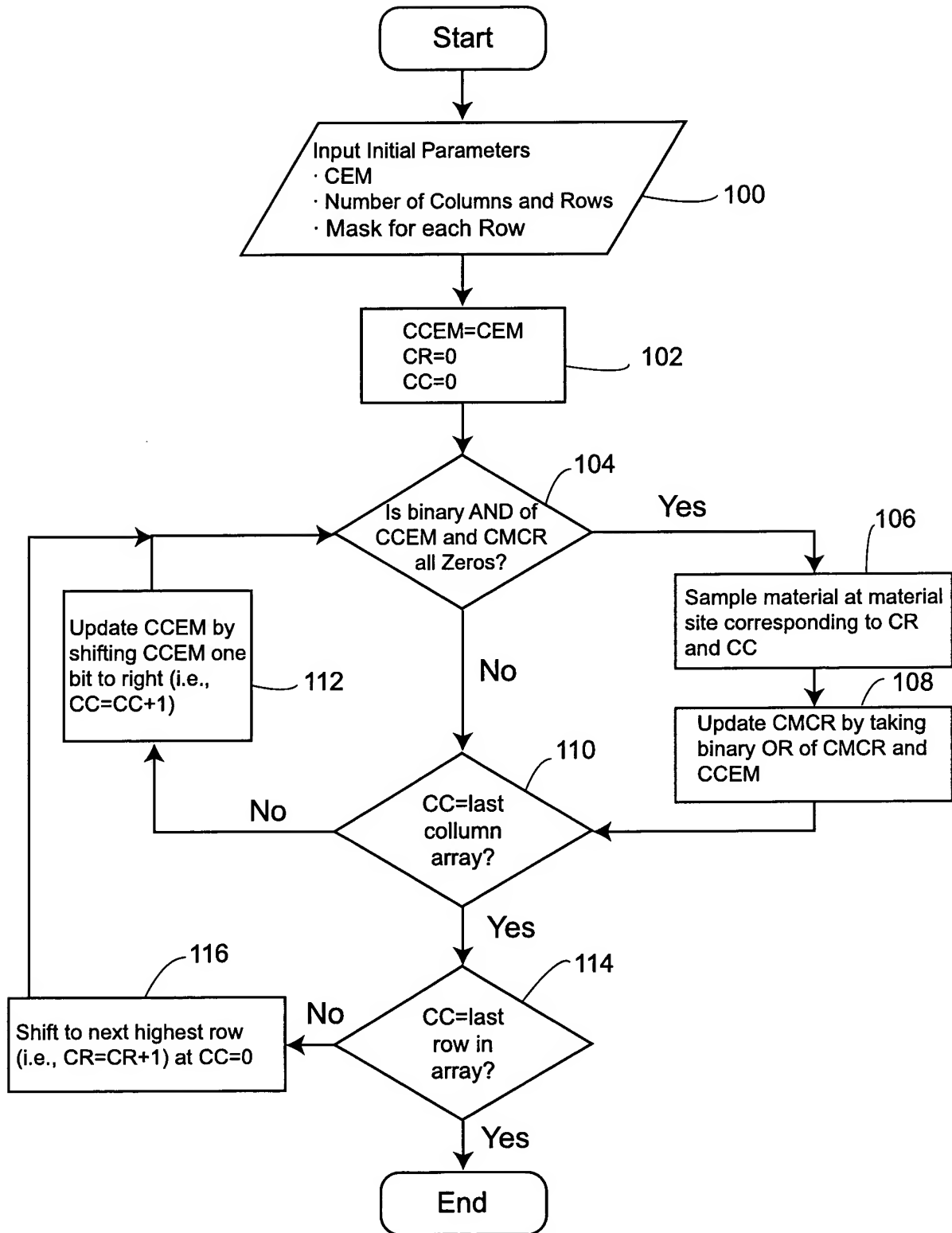


Fig. 1

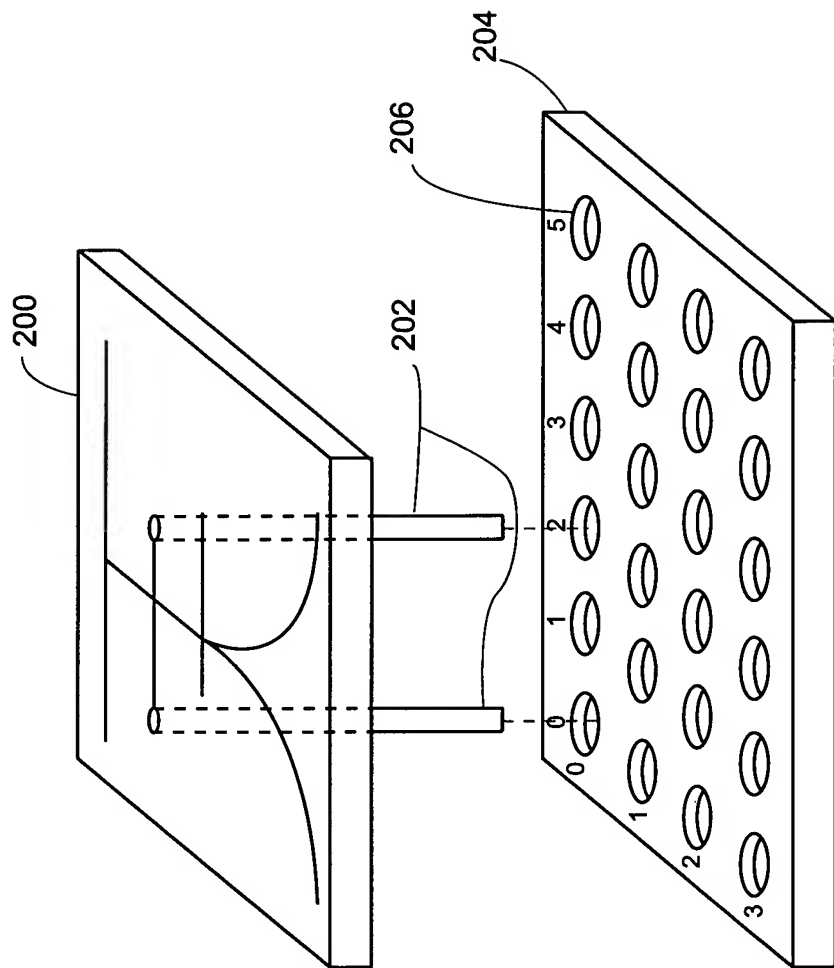


Fig. 2

Three 4x6 grids of binary data (0s and 1s) representing the first three columns of the matrix. Each grid has a header row with indices 0, 1, 2, 3, 4, 5 and a column header with indices 0, 1, 2, 3.

	0	1	2	3	4	5
0	0	0	0	0	1	1
1	1	0	0	0	0	1
2	1	0	0	0	0	1
3	1	1	0	0	0	0

	0	1	2	3	4	5
0	1	1	1	1	1	1
1	1	0	0	0	0	1
2	1	0	0	0	0	1
3	1	1	0	0	0	0

	0	1	2	3	4	5
0	1	1	1	1	1	1
1	1	1	1	1	1	1
2	1	0	0	0	0	1
3	1	1	0	0	0	0

A

	0	1	2	3	4	5
0	1	1	1	1	1	1
1	1	1	1	1	1	1
2	1	1	1	1	1	1
3	1	1	0	0	0	0



0	1	2	3	4	5
0	1	1	1	1	1
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1

W

Fig. 3

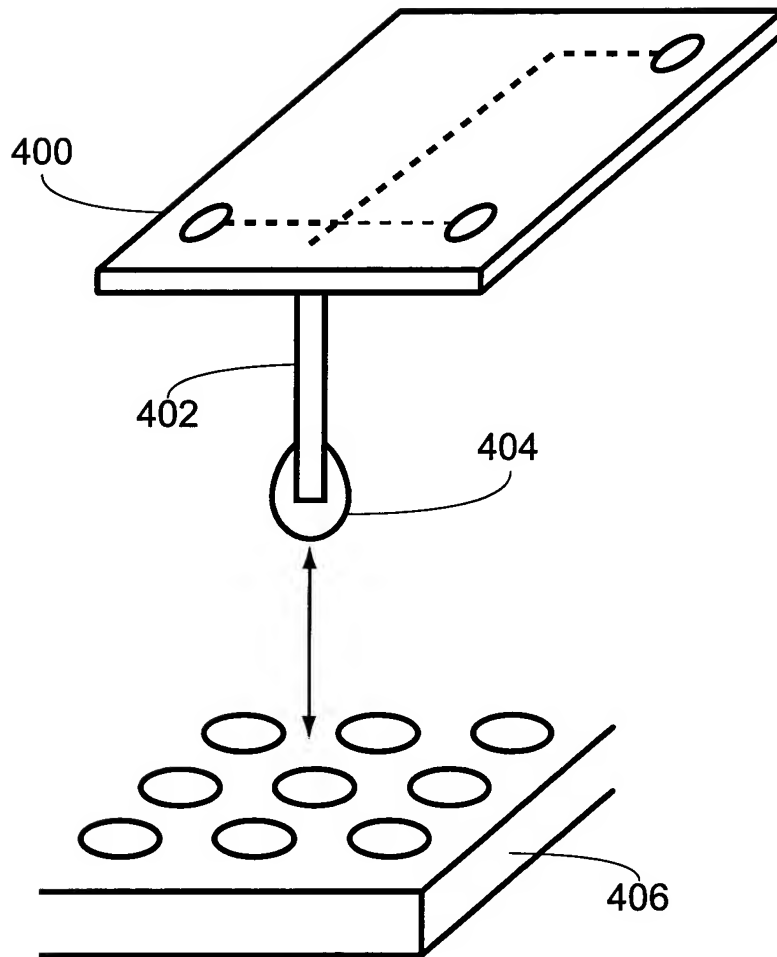


Fig. 4

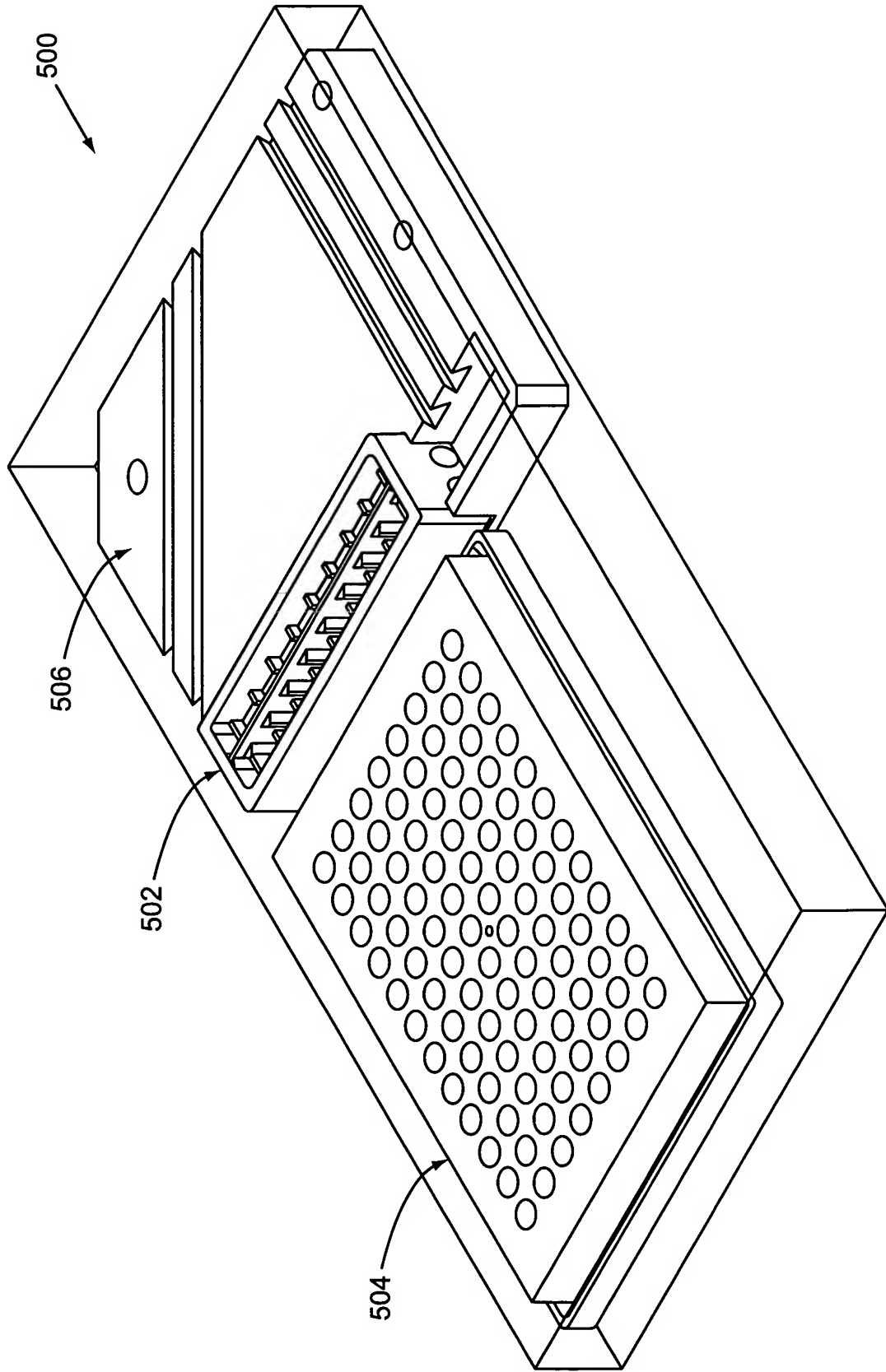


Fig. 5

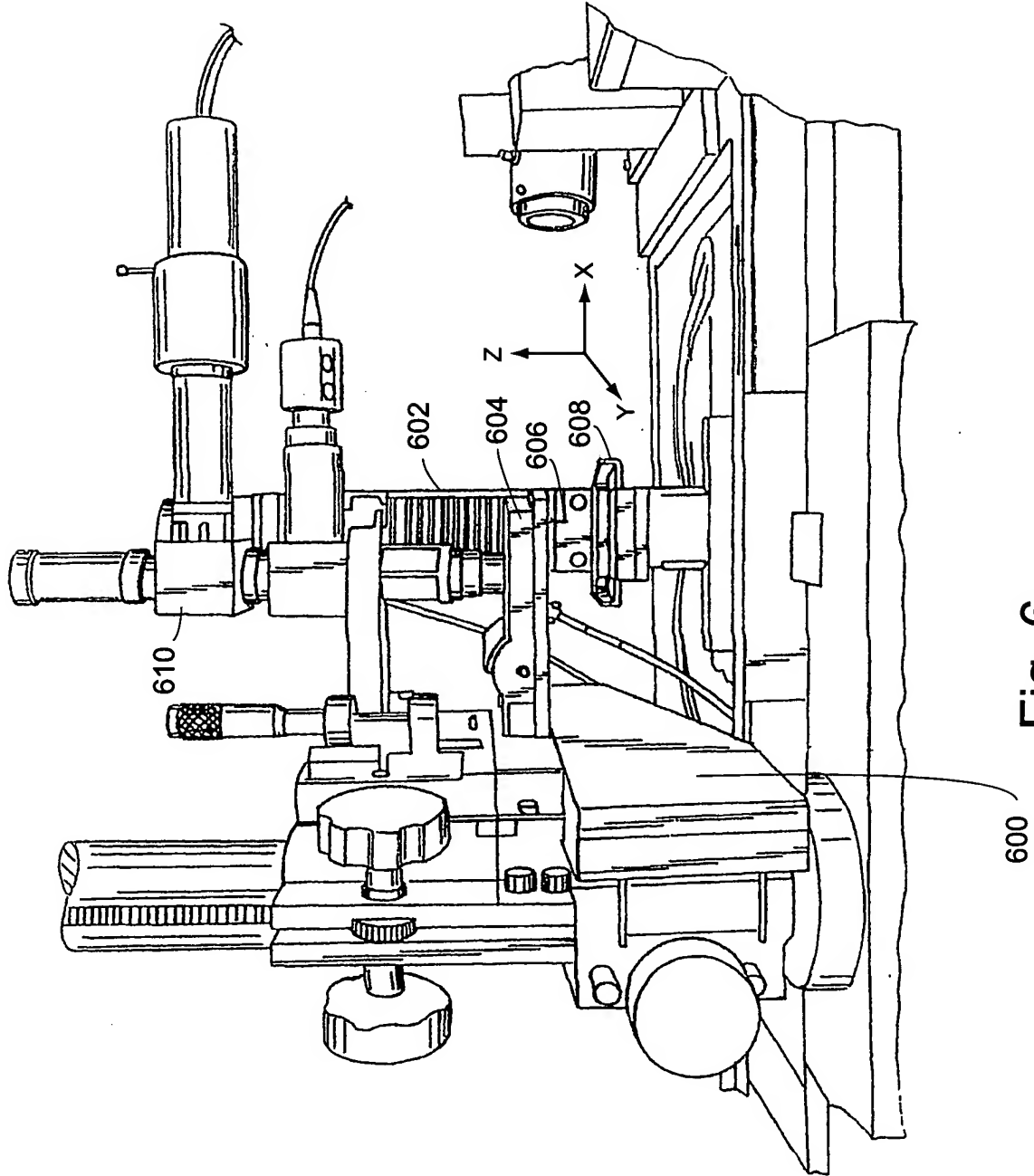


Fig. 6

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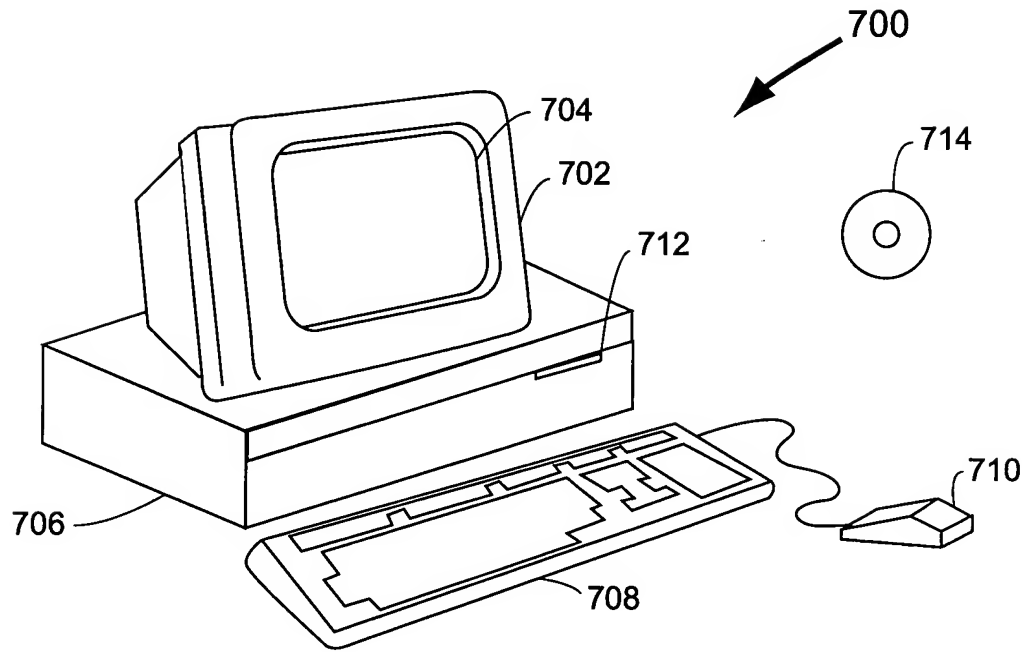


Fig. 7

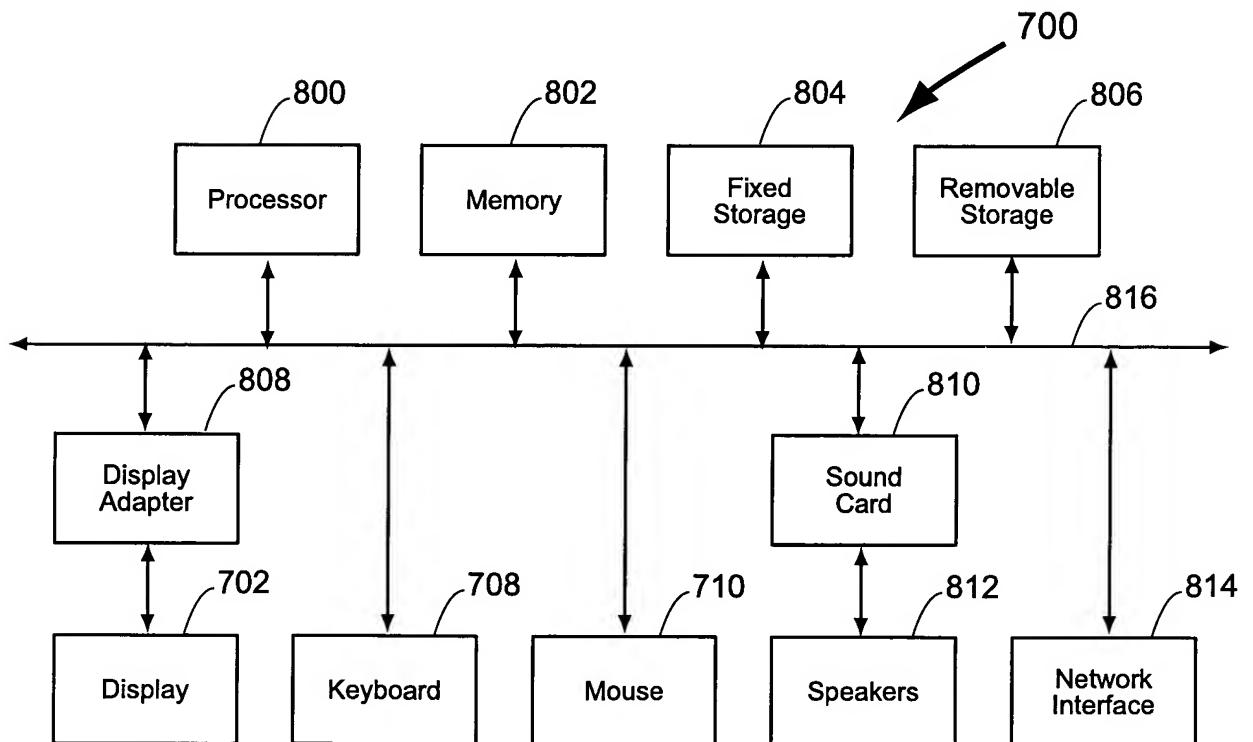


Fig. 8

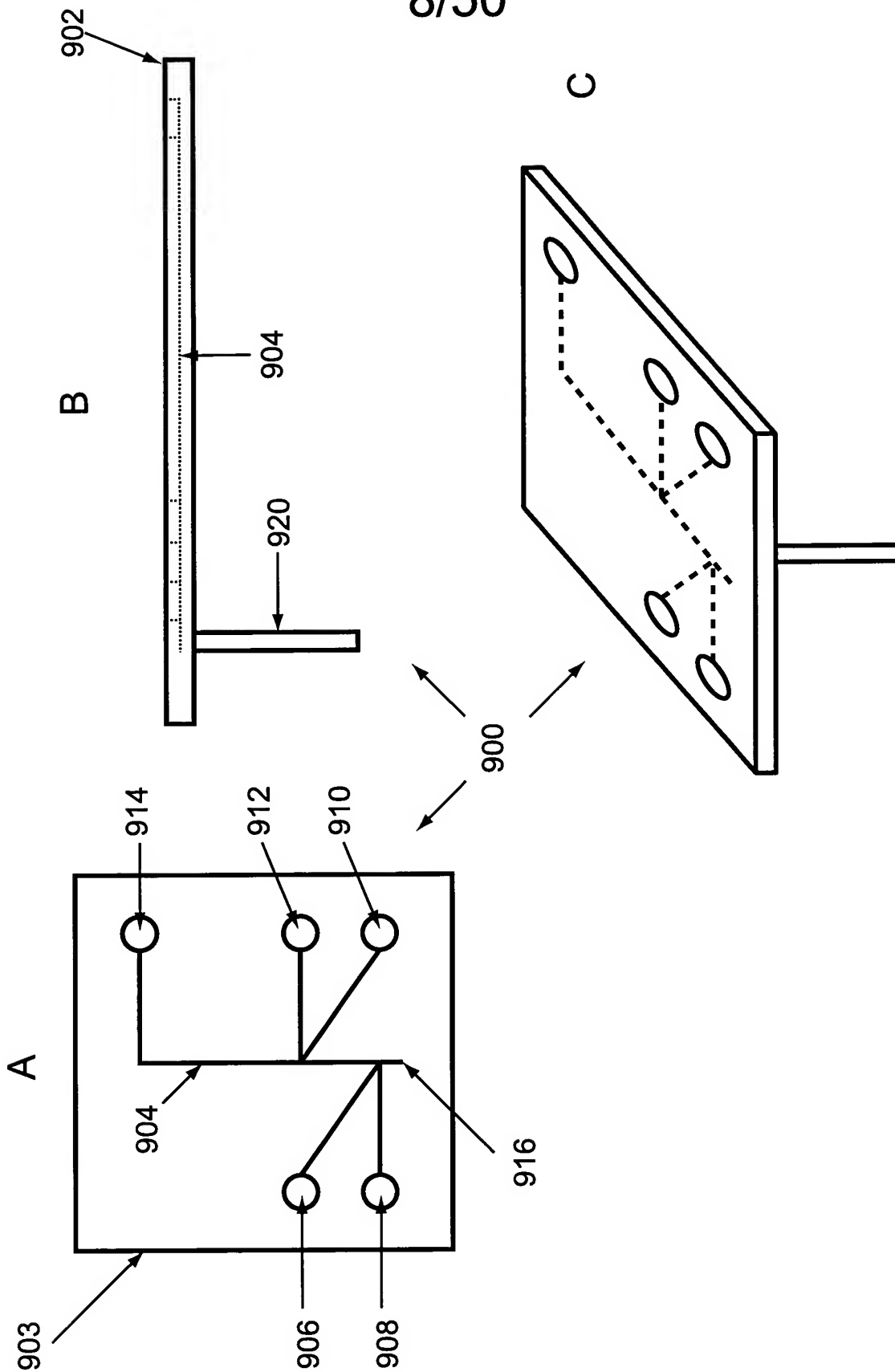


Fig. 9

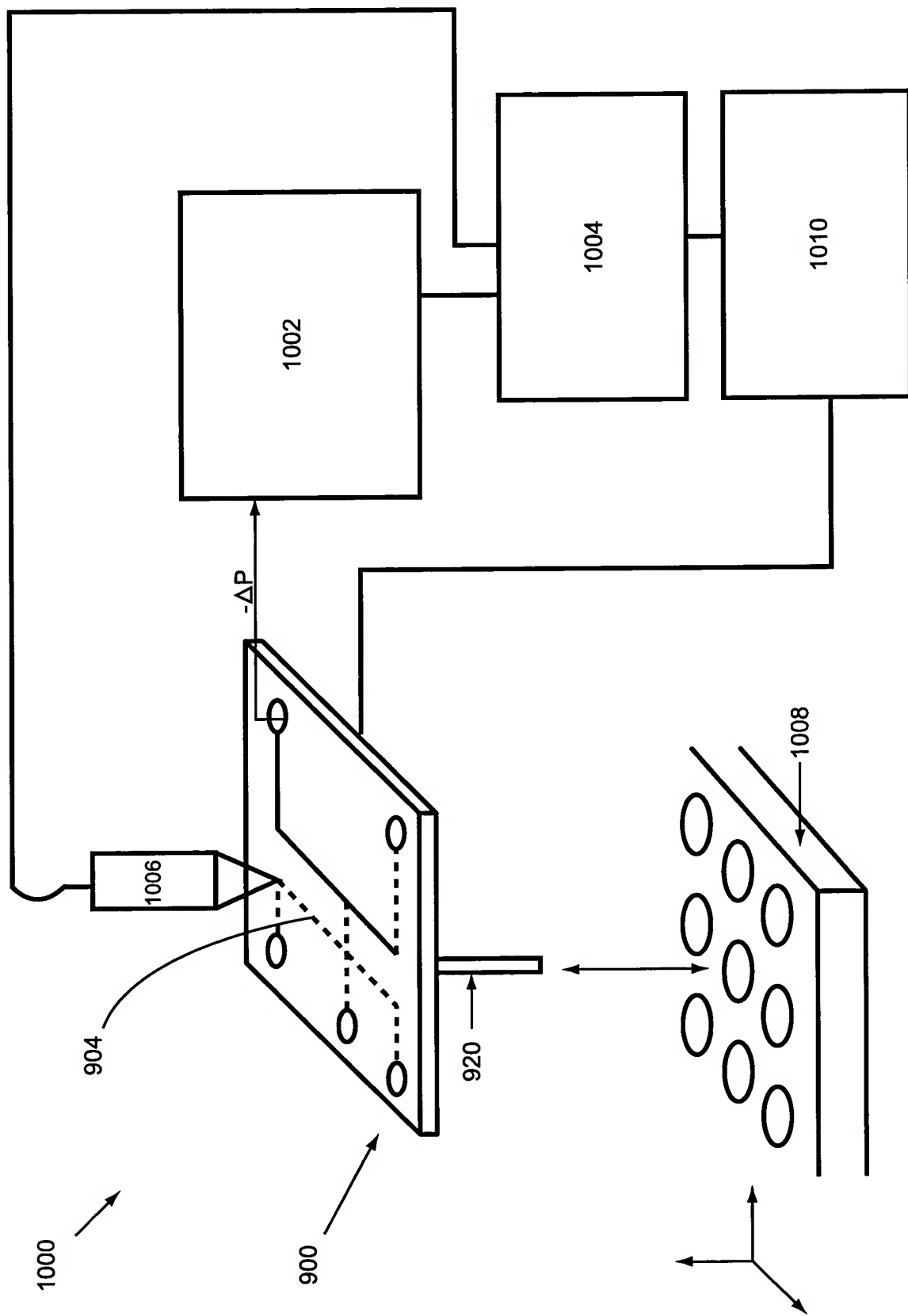


Fig. 10

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10021394.1.1001

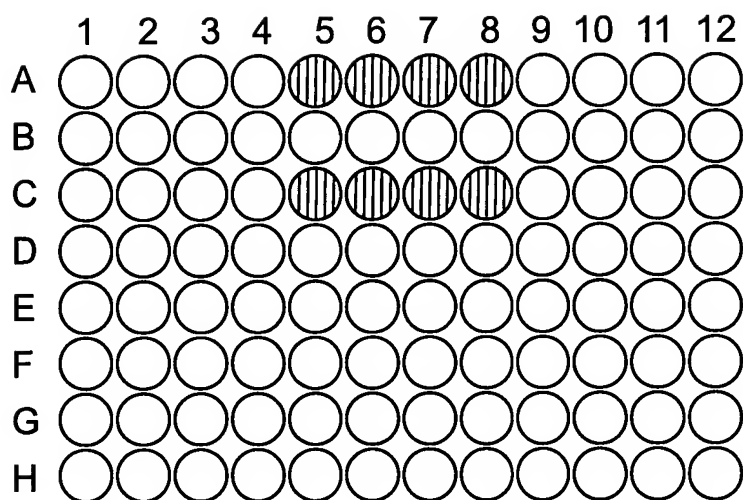


Fig. 11A

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1002184-1001
1002184-1001

Dwell Pattern	
Name:	FewNoTrough.DP4_96
Row A: 5,6	

Fig. 11B

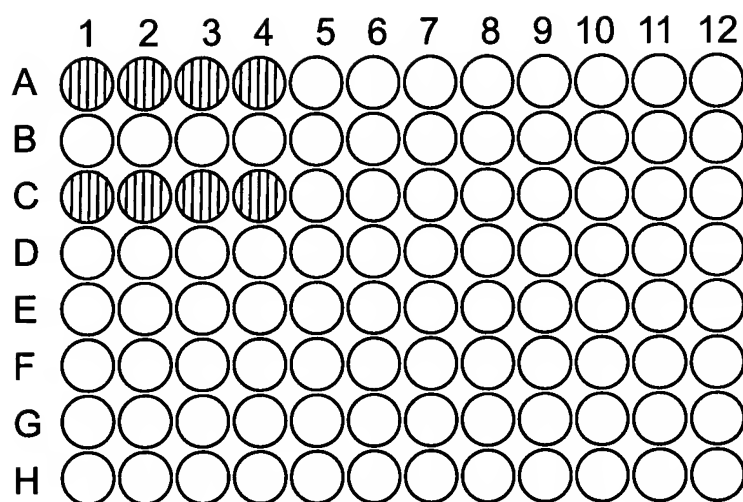


Fig. 11C

TOP SECRET

Dwell Pattern

Name: FewTrough.DP4_96

Row A: 1,2

Fig. 11D

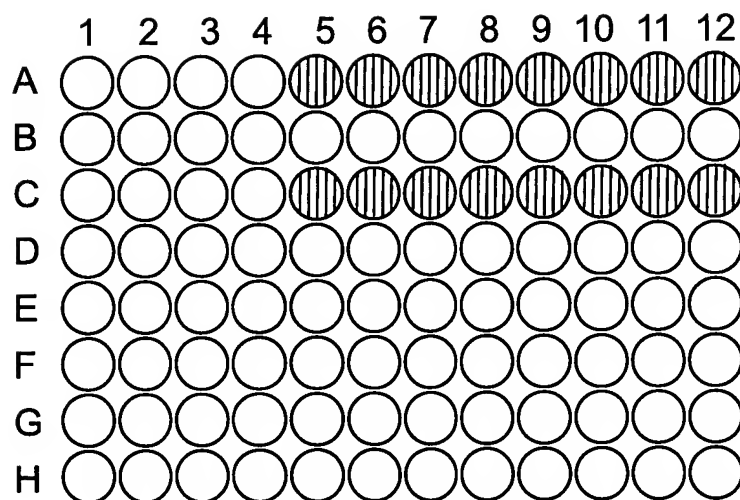


Fig. 11E

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1001692001

Dwell Pattern	
Name:	SeveralNoTrough.DP4_96
Row A: 5,6,9,10	

Fig. 11F

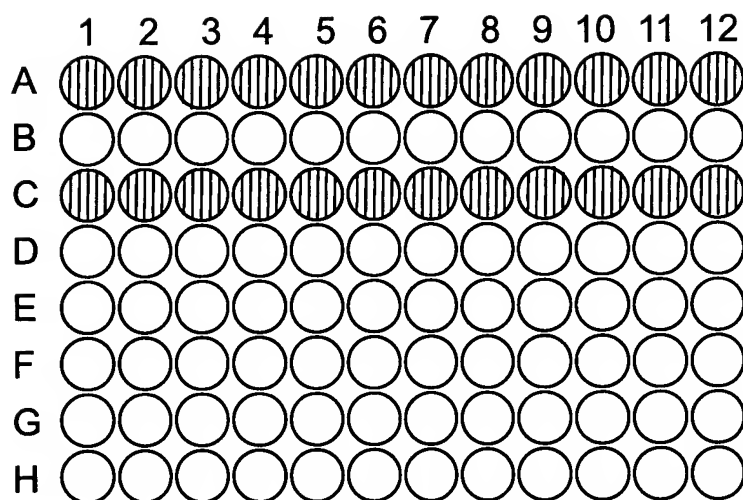


Fig. 11G

Dwell Pattern

Name: SeveralTrough.DP4_96

Row A: 1,2,5,6,9,10

Fig. 11H

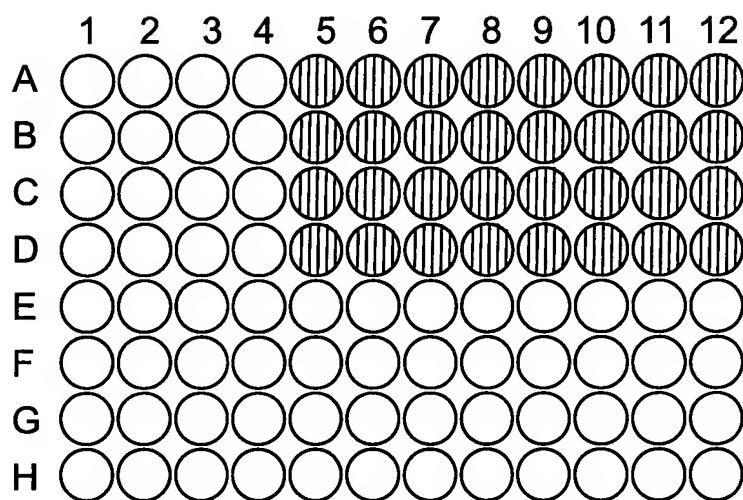


Fig. 11I

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10021331.121001

- Dwell Pattern -	
Name:	HalfNoTrough.DP4_96
Row A: 5,6,9,10 Row B: 5,6,9,10	

Fig. 11J

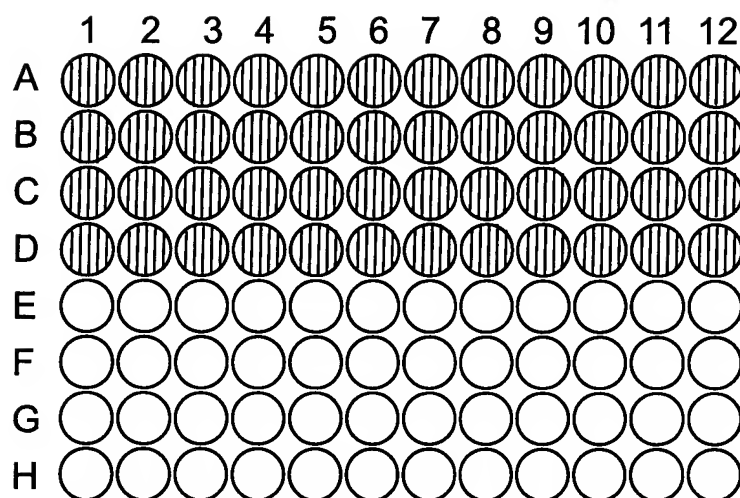


Fig. 11K

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1003130412001

Dwell Pattern	
Name:	HalfTrough.DP4_96
Row A: 1,2,5,6,9,10 Row B: 1,2,5,6,9,10	

Fig. 11L

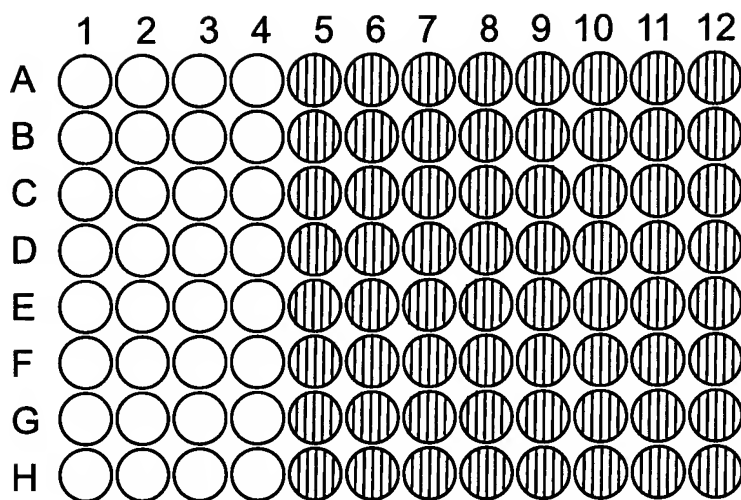


Fig. 11M

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10021894.131001

Dwell Pattern	
Name:	FullNoTrough.DP4_96
Row A:	5,6,9,10
Row B:	5,6,9,10
Row E:	5,6,9,10
Row F:	5,6,9,10

Fig. 11N

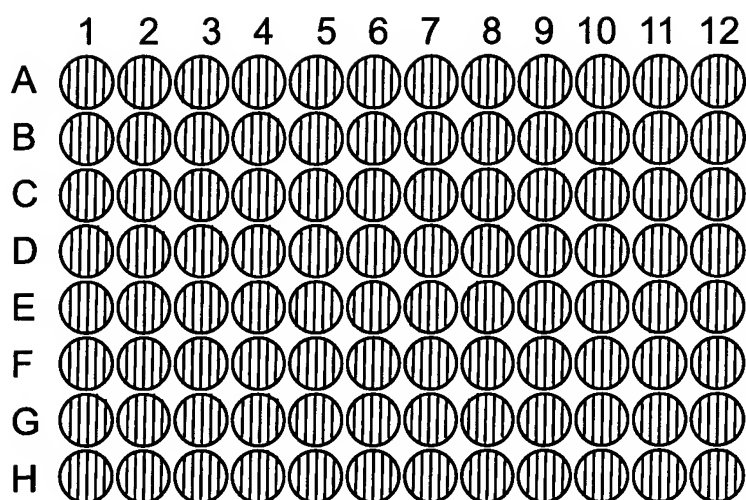


Fig. 11O

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FullTrough.DP4_96

Dwell Pattern	
Name:	FullTrough.DP4_96
Row A:	1,2,5,6,9,10
Row B:	1,2,5,6,9,10
Row E:	1,2,5,6,9,10
Row F:	1,2,5,6,9,10

Fig. 11P

Footprint

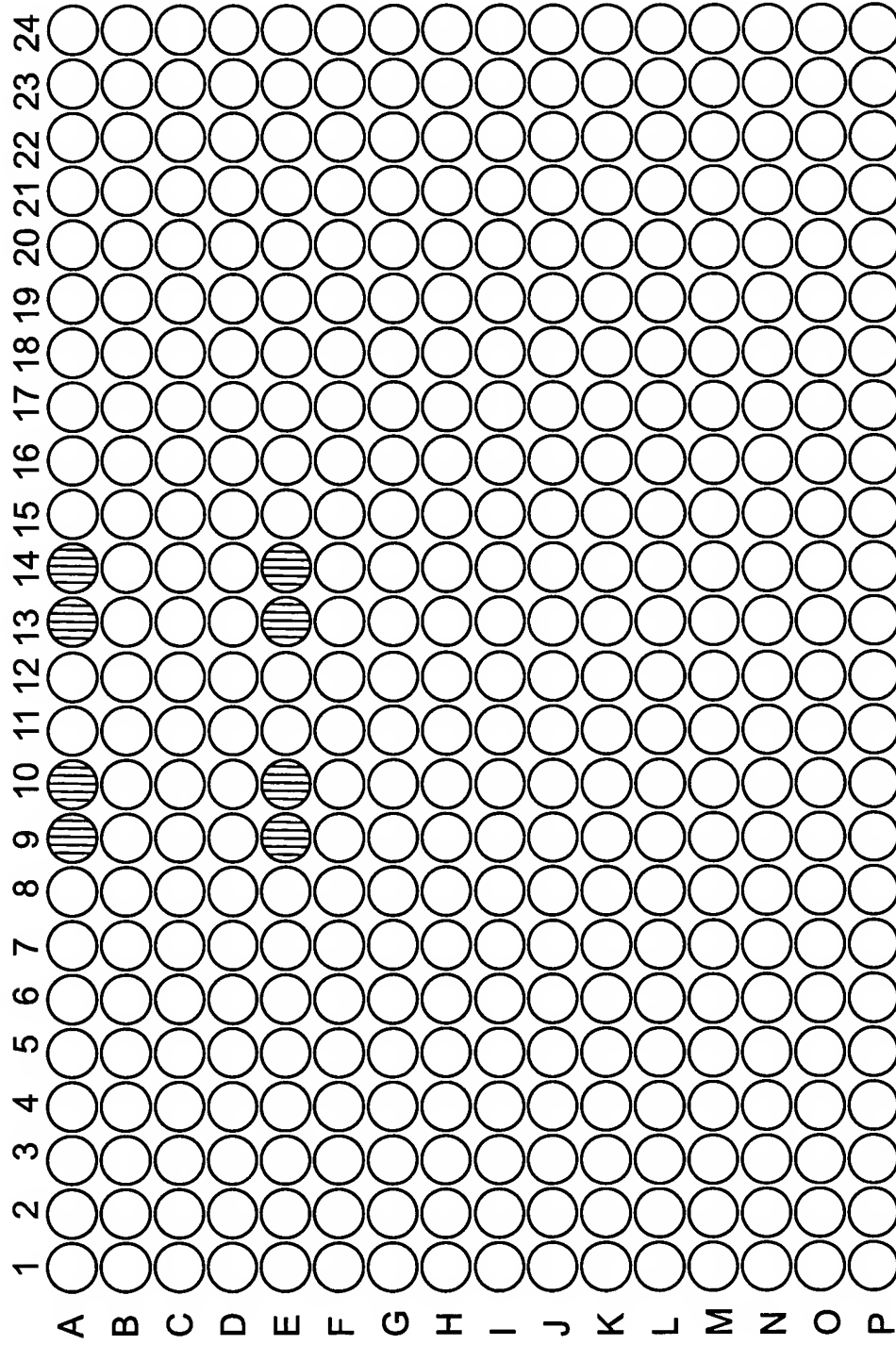


Fig. 12A

1001694-1001

Sipper Options

General

Directories

Sample Wells

Advanced

Dwell Pattern

Name: FewNoTrough.DP4_384

New

Row A: 9,10

Load

Save As

Fig. 12B

TABLE 4631200E

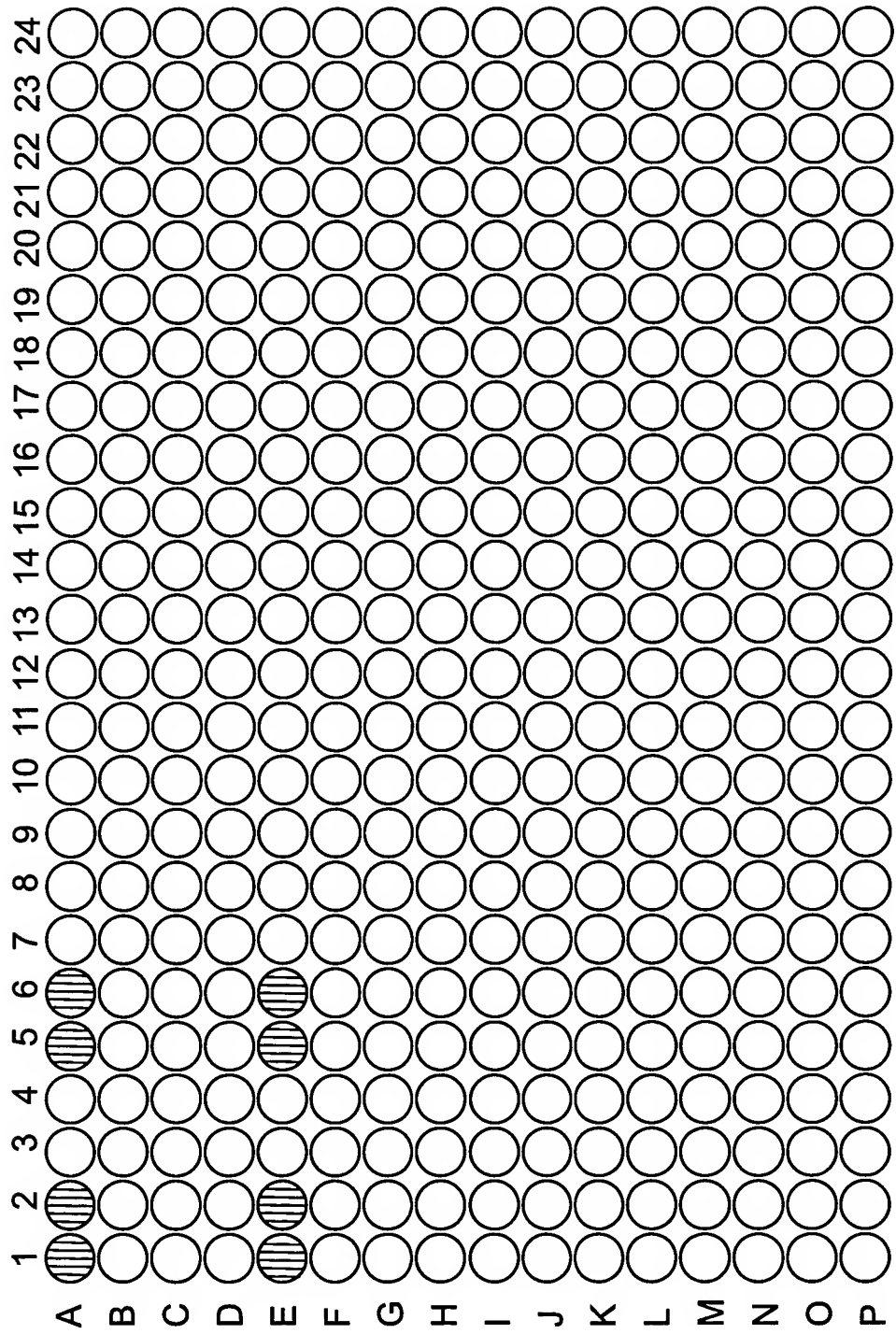


Fig. 12C

10021394.121001

Sipper Options

General

Directories

Sample Wells

Advanced

Dwell Pattern

Name: FewTrough.DP4_384

Row A: 1,2

New

Load

Save As

Fig. 12D

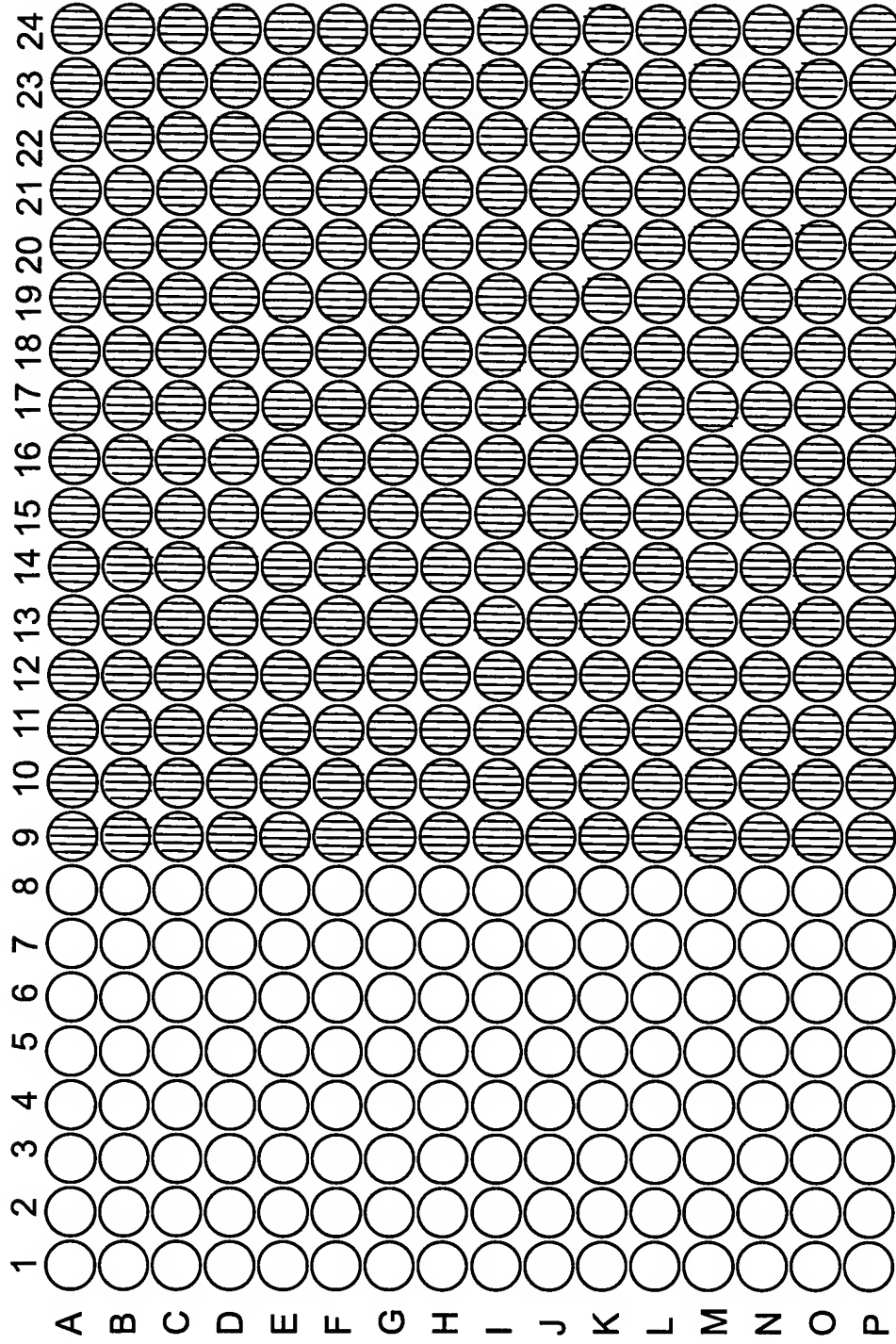


Fig. 12E

Sipper Options [X]

General Directories **Sample Wells** Advanced

Dwell Pattern

Name:

Row A:	9,10,11,12,17,18,19,20
Row B:	9,10,11,12,17,18,19,20
Row C:	9,10,11,12,17,18,19,20
Row D:	9,10,11,12,17,18,19,20
Row I:	9,10,11,12,17,18,19,20
Row J:	9,10,11,12,17,18,19,20
Row K:	9,10,11,12,17,18,19,20
Row L:	9,10,11,12,17,18,19,20

Fig. 12F

FIG. 12G

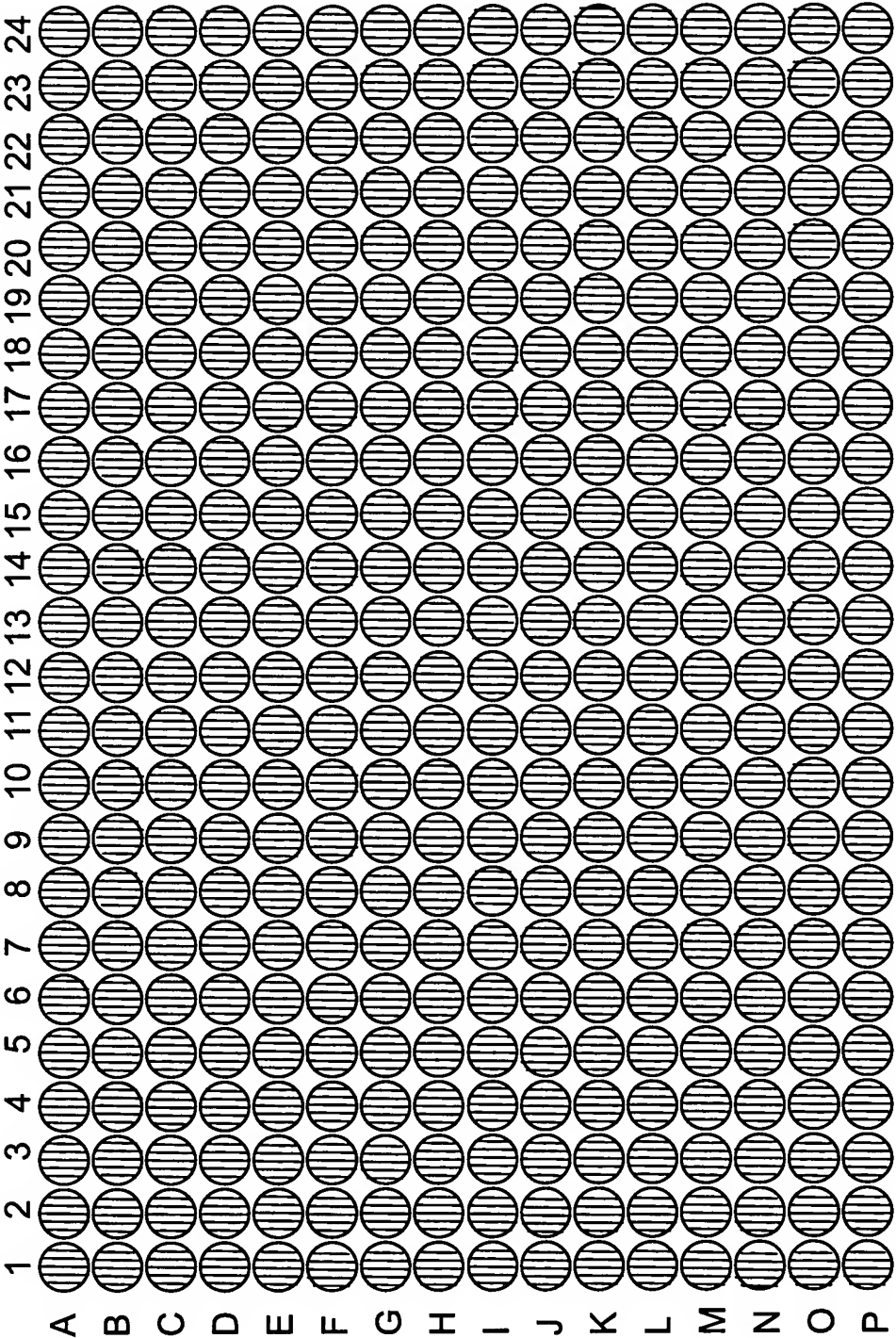


Fig. 12G

TECHNICAL SUPPORT

The image shows a screenshot of a software dialog box titled "Sipper Options". It has four tabs: "General", "Directories", "Sample Wells" (which is selected), and "Advanced". Inside the "Sample Wells" tab, there is a section titled "Dwell Pattern". Below this title is a text field labeled "Name:" containing the text "FullTrough.DP4_384". To the right of the text field are three buttons: "New", "Load", and "Save As". Below the text field is a list of rows, each followed by a sequence of numbers: "Row A: 1,2,3,4,9,10,11,12,17,18,19,20", "Row B: 1,2,3,4,9,10,11,12,17,18,19,20", "Row C: 1,2,3,4,9,10,11,12,17,18,19,20", "Row D: 1,2,3,4,9,10,11,12,17,18,19,20", "Row I: 1,2,3,4,9,10,11,12,17,18,19,20", "Row J: 1,2,3,4,9,10,11,12,17,18,19,20", "Row K: 1,2,3,4,9,10,11,12,17,18,19,20", and "Row L: 1,2,3,4,9,10,11,12,17,18,19,20".

Sipper Options

General Directories **Sample Wells** Advanced

Dwell Pattern

Name: FullTrough.DP4_384

New

Load

Save As

Row A: 1,2,3,4,9,10,11,12,17,18,19,20
Row B: 1,2,3,4,9,10,11,12,17,18,19,20
Row C: 1,2,3,4,9,10,11,12,17,18,19,20
Row D: 1,2,3,4,9,10,11,12,17,18,19,20
Row I: 1,2,3,4,9,10,11,12,17,18,19,20
Row J: 1,2,3,4,9,10,11,12,17,18,19,20
Row K: 1,2,3,4,9,10,11,12,17,18,19,20
Row L: 1,2,3,4,9,10,11,12,17,18,19,20

Fig. 12H

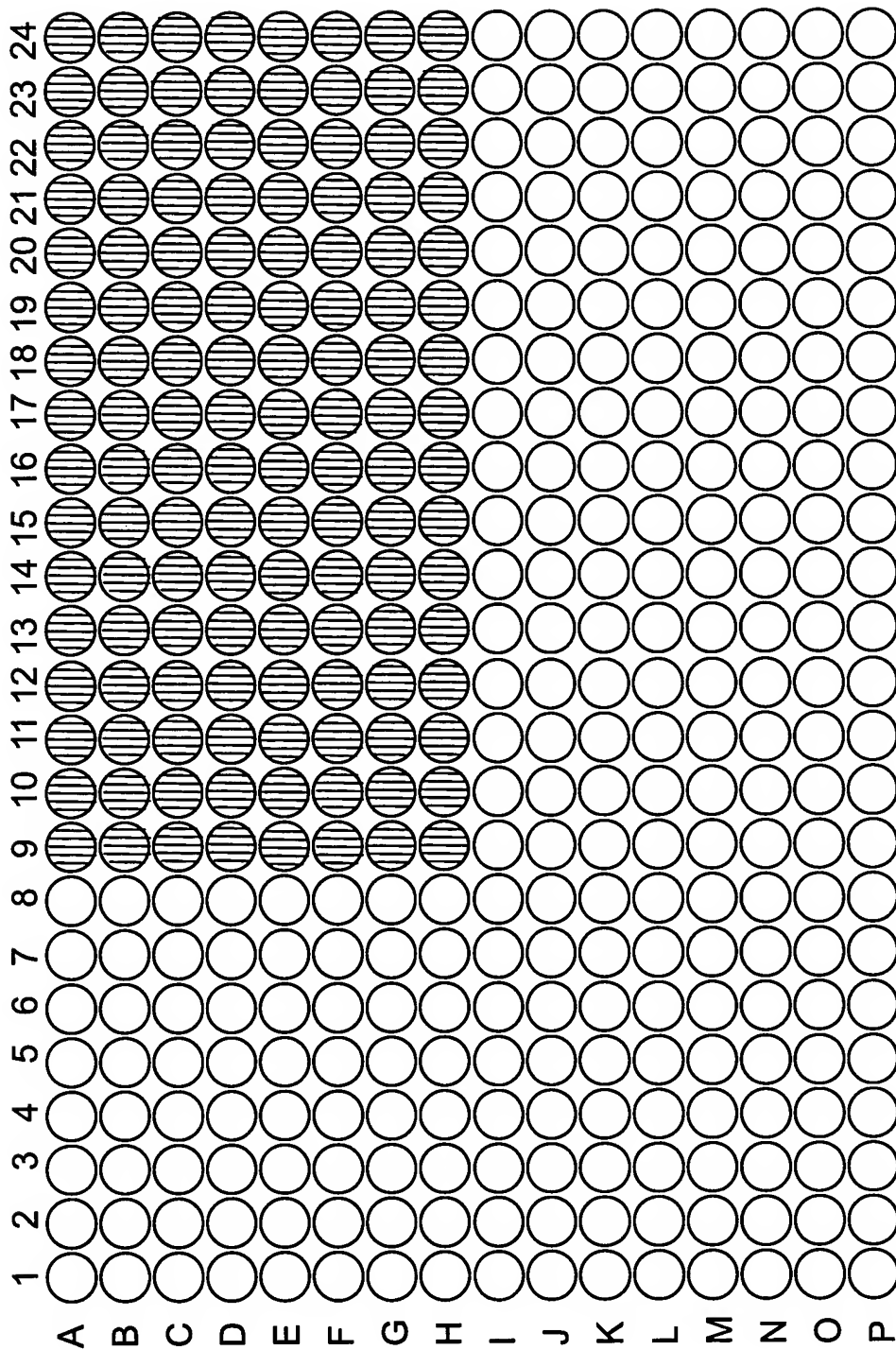


Fig. 12I

Sipper Options [X]

General Directories Sample Wells Advanced

Dwell Pattern

Name:

Row A: 9,10,11,12,17,18,19,20
Row B: 9,10,11,12,17,18,19,20
Row C: 9,10,11,12,17,18,19,20
Row D: 9,10,11,12,17,18,19,20

Fig. 12J

T00T2T"463T200T

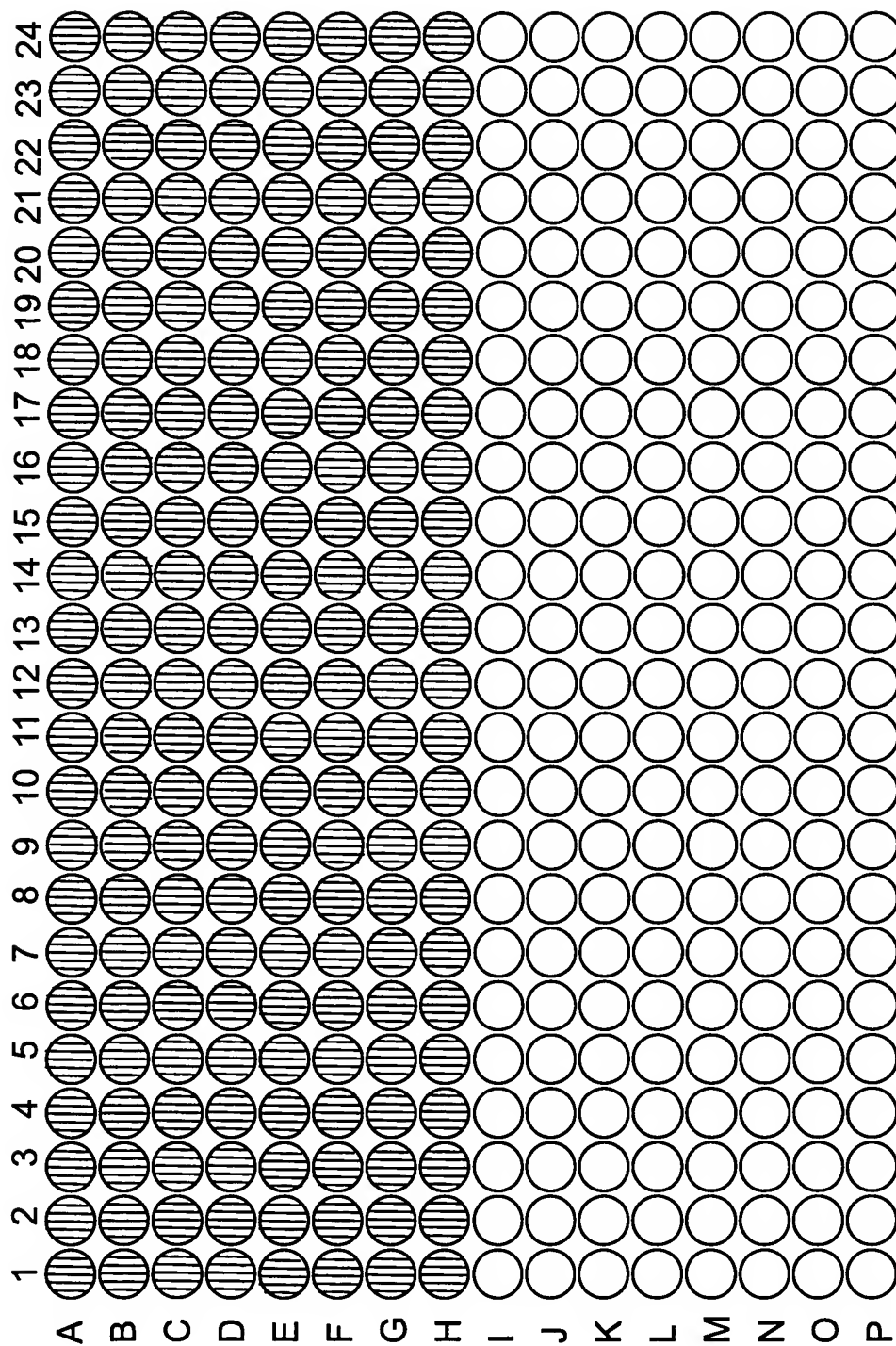


Fig. 12K

Sipper Options [X]

General Directories Sample Wells Advanced

Dwell Pattern

Name:

Row A: 1,2,3,4,9,10,11,12,17,18,19,20
Row B: 1,2,3,4,9,10,11,12,17,18,19,20
Row C: 1,2,3,4,9,10,11,12,17,18,19,20
Row D: 1,2,3,4,9,10,11,12,17,18,19,20

Fig. 12L

FOOT "HOLE"

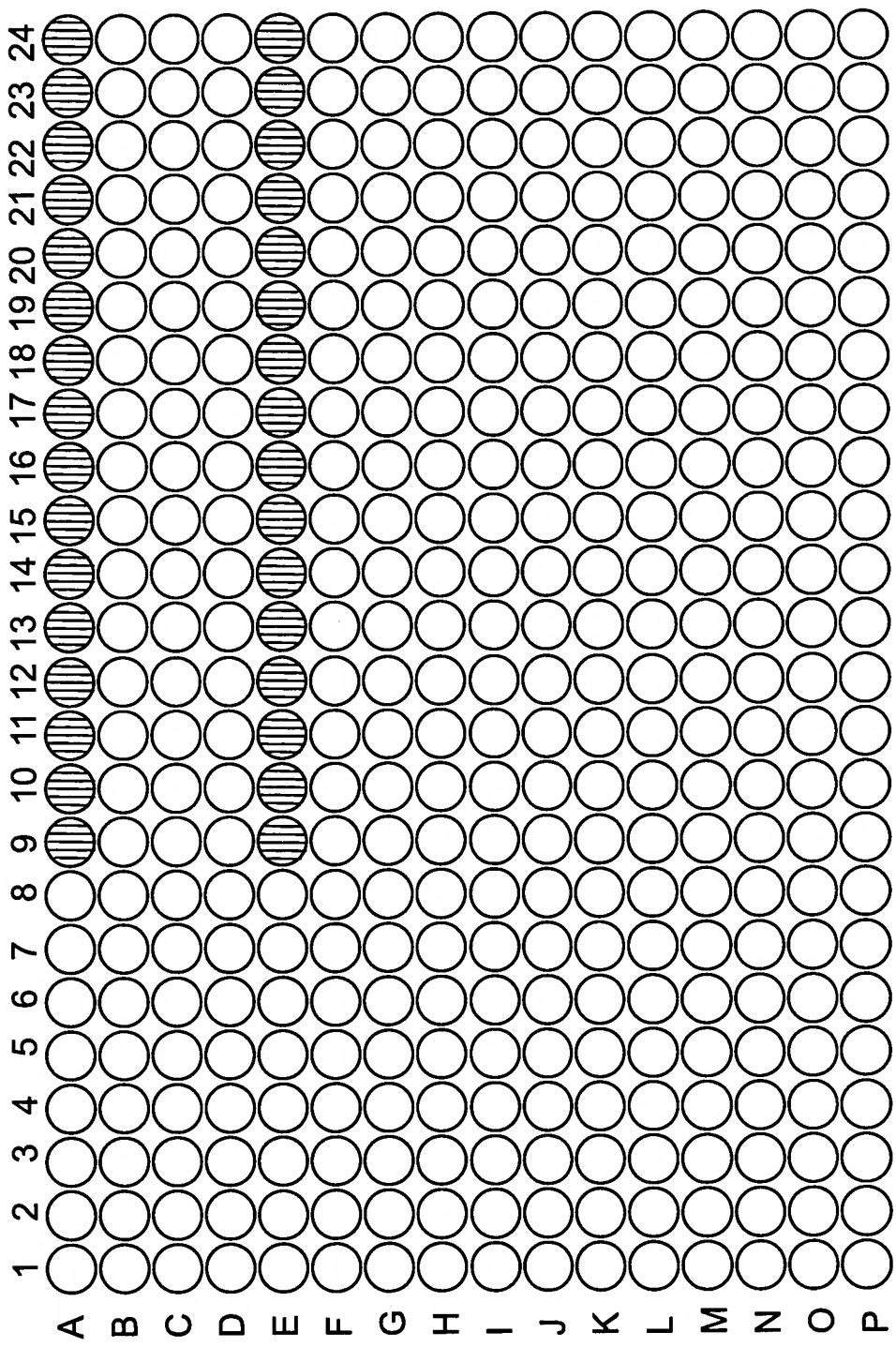


Fig. 12M

Sipper Options

General

Directories

Sample Wells

Advanced

Dwell Pattern

Name: SeveralNoTrough.DP4_384

New

Row A: 9,10,11,12,17,18,19,20

Load

Save As

Fig. 12N

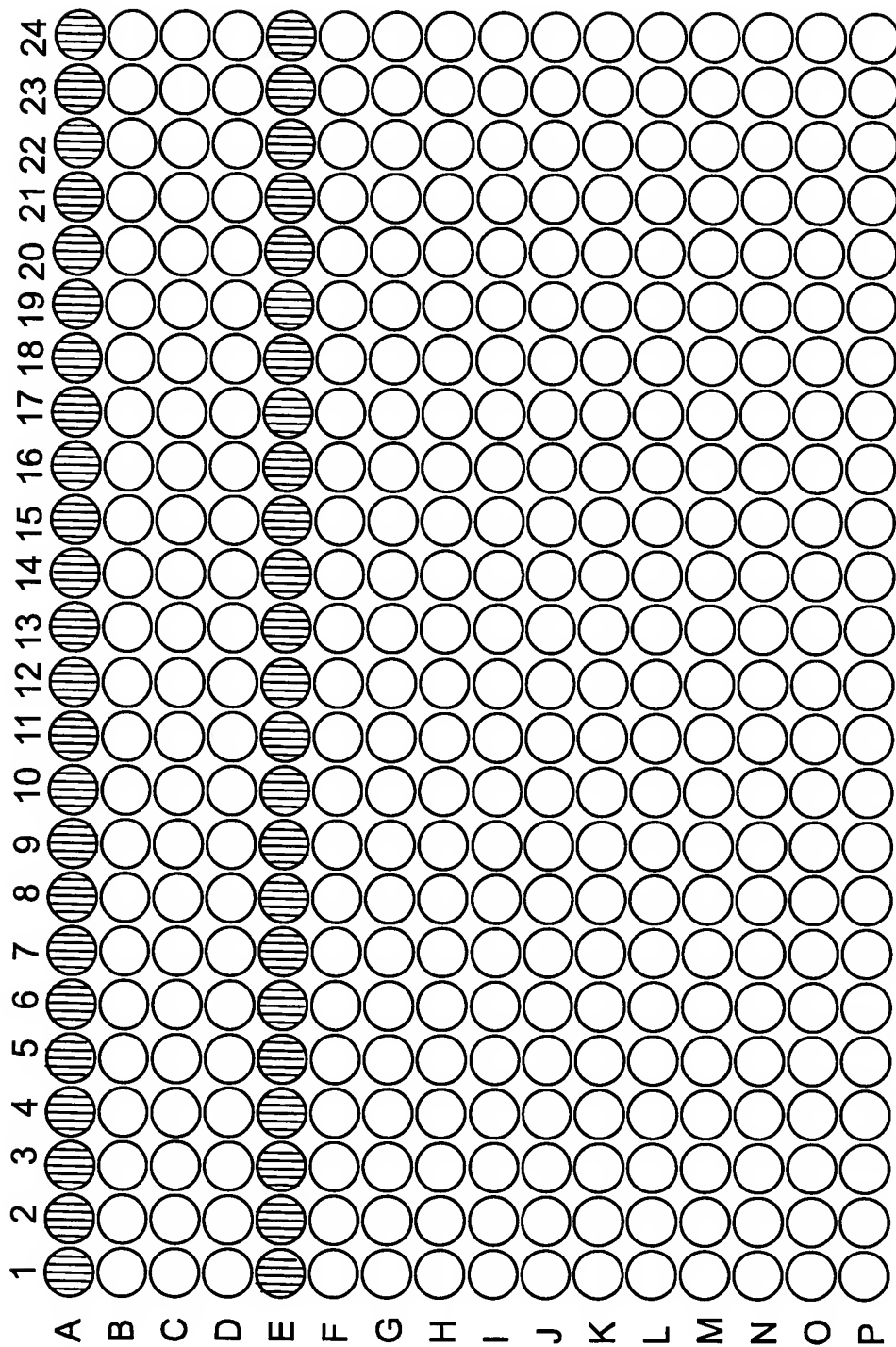


Fig. 120

Sipper Options [X]

General Directories Sample Wells Advanced

Dwell Pattern

Name: SeveralTrough.DP4_384

Row A: 1,2,3,4,9,10,11,12,17,18,19,20

New

Load

Save As

Fig. 12P

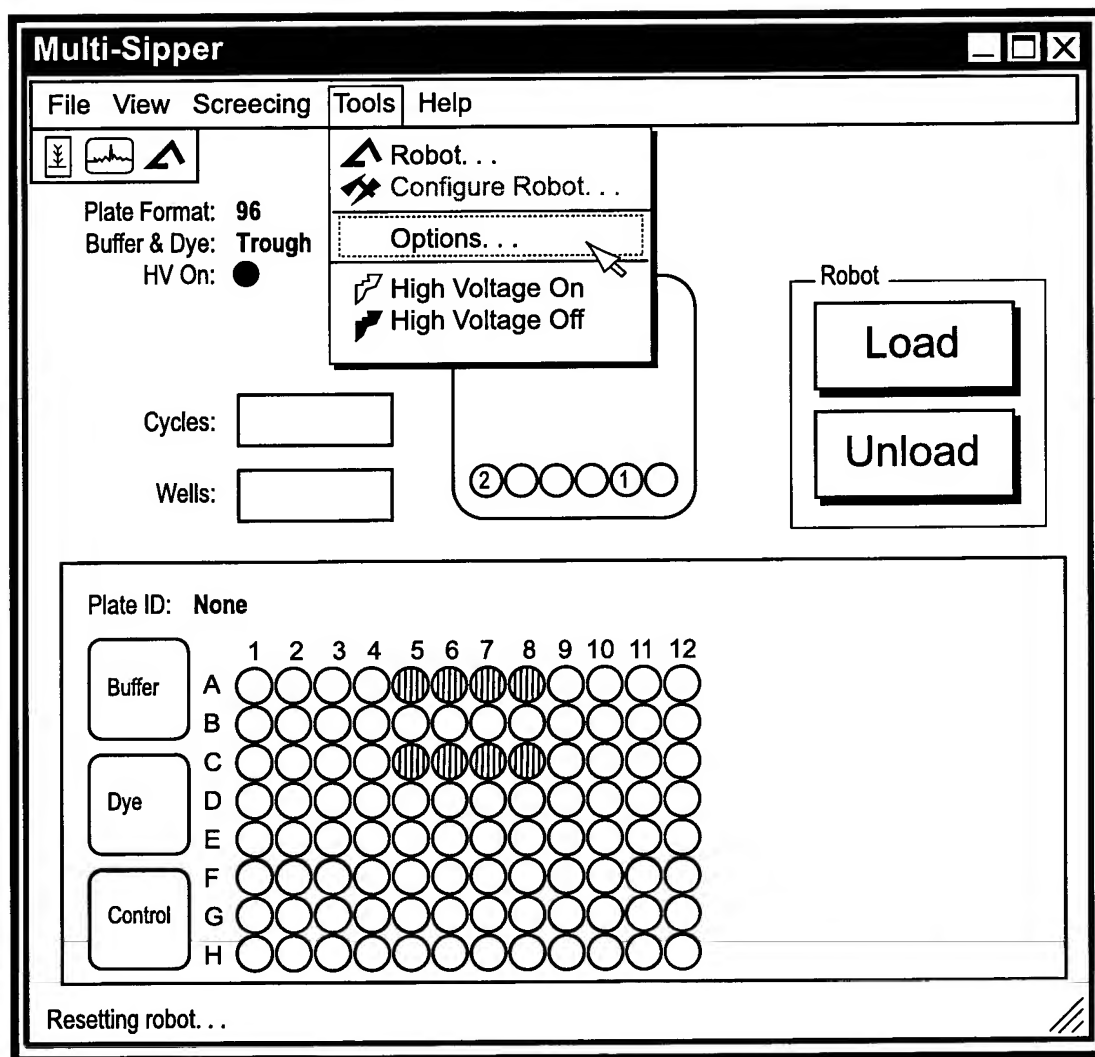


Fig. 13A

Sipper Options [X]

Directories | Sample Wells | **Robot Settings**

☒ Pickup plate before starting robot motion

Plate format:

Chip Format: ▼

Fig. 13B

Sipper Options [X]

Directories | **Sample Wells** | Robot Settings

☒ Use 1 rough for Butter and Dye Wells

Dwell Pattern

Name:

Row A: 1,2,3,4,9,10,11,12,17,18,19,20
Row B: 1,2,3,4,9,10,11,12,17,18,19,20
Row C: 1,2,3,4,9,10,11,12,17,18,19,20
Row D: 1,2,3,4,9,10,11,12,17,18,19,20
Row I: 1,2,3,4,9,10,11,12,17,18,19,20
Row J: 1,2,3,4,9,10,11,12,17,18,19,20
Row K: 1,2,3,4,9,10,11,12,17,18,19,20
Row L: 1,2,3,4,9,10,11,12,17,18,19,20

☒ Control Wells On Plate

Sipper 3: Sipper 4:
Sipper 2: Sipper 1:

Fig. 13C

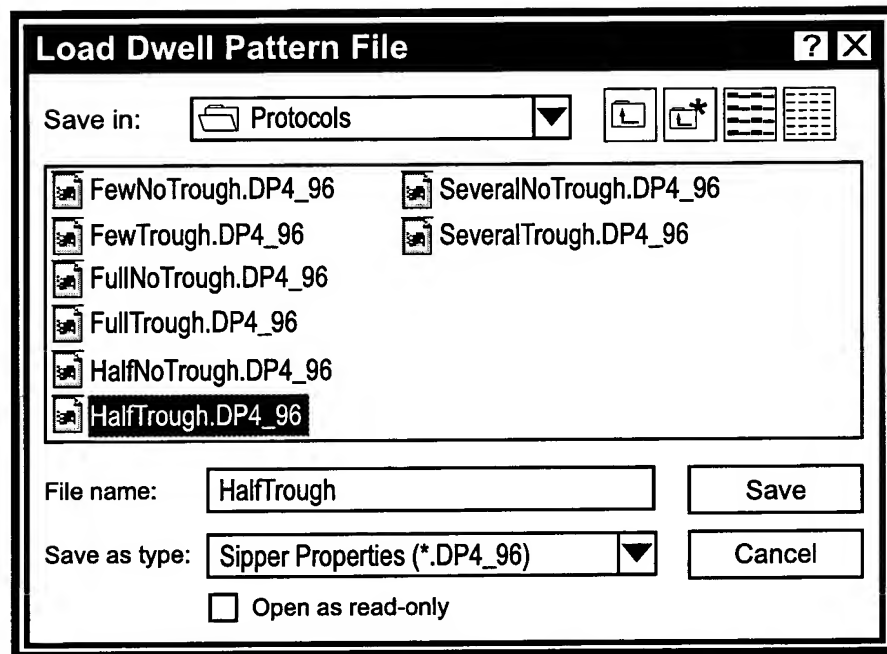


Fig. 13D

Sipper Options [X]

Directories | **Sample Wells** | Robot Settings

Dwell Pattern

Name:

Row A: 1,2,5,6,9,10
Row B: 1,2,5,6,9,10

Control Wells

☐ Control Wells On Plate

Sipper 3: Sipper 4:
Sipper 2: Sipper 1:

Fig. 13E

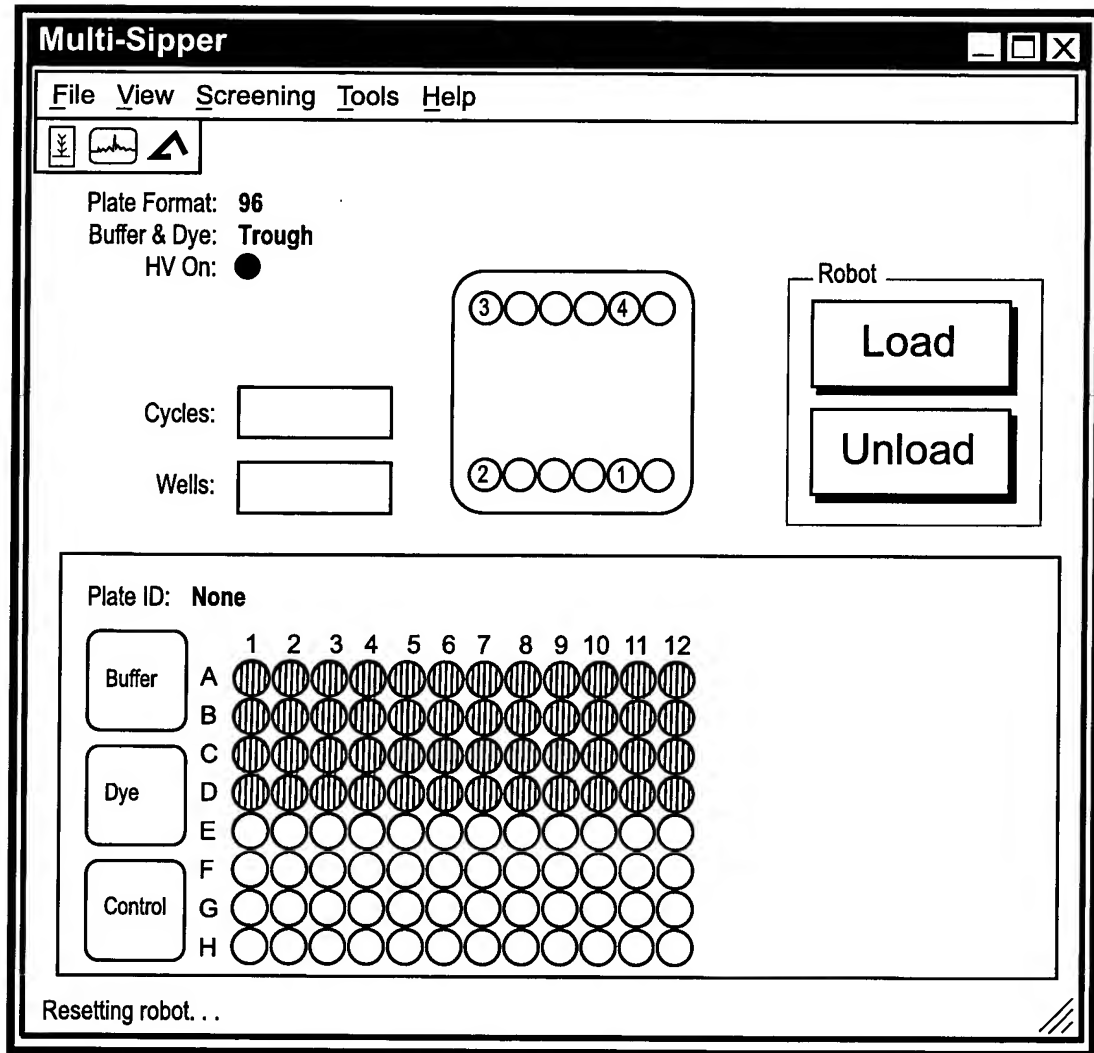


Fig. 13F

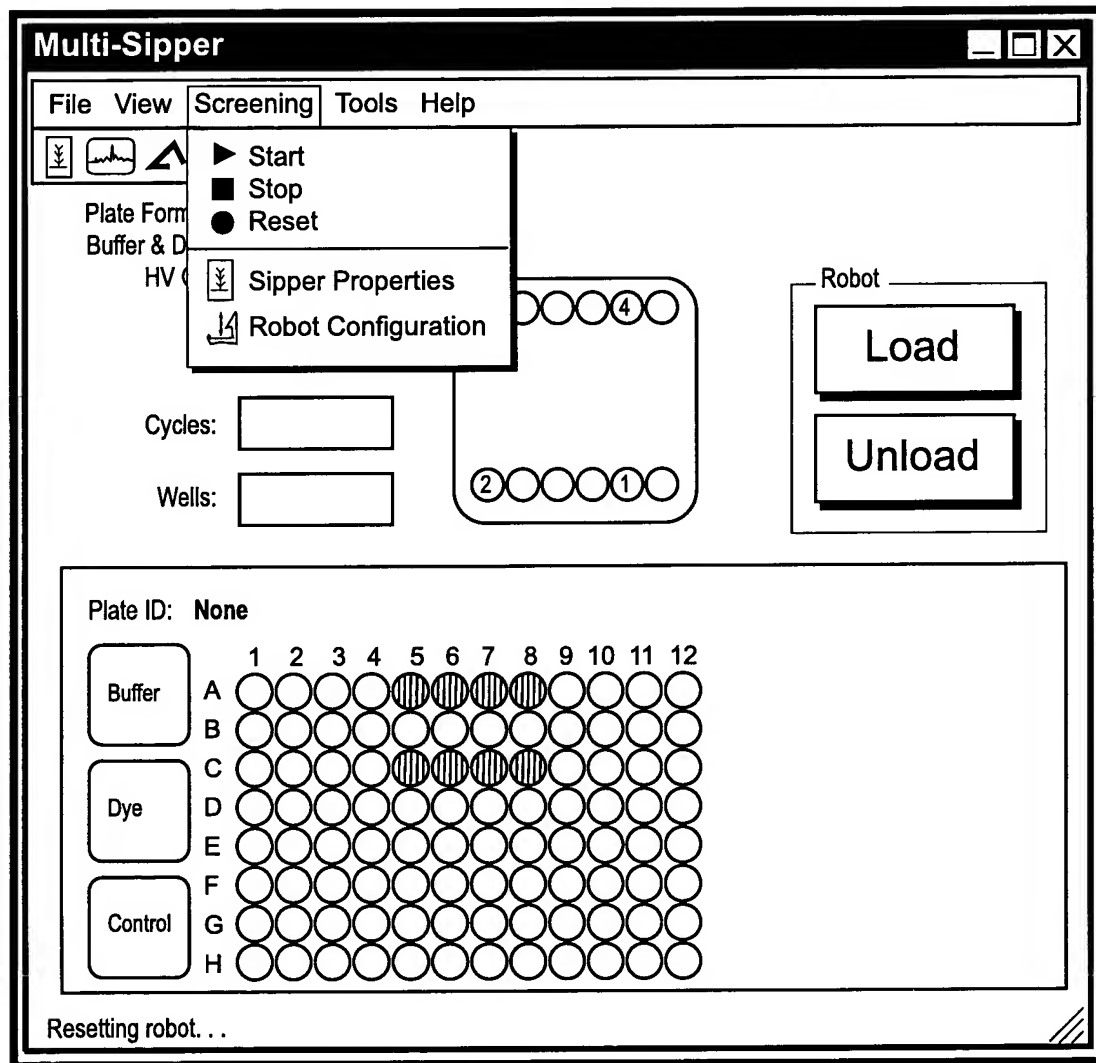


Fig. 14A

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Sipper Property - Default Sipper Properties [X]

Initial Delay secs

Buffer secs

Sample secs

☒ Dye Well

Dye secs

Injections pre/post plate

☐ Single dye injection between rows

☒ Pressure Driven Flow

Pressure PSI

Base Pressure PSI

☒ Control Well On Trough

Pre Control Buffer secs

Control secs

Post Control Buffer secs

Sample Well Cycles

Final Delay secs

New

Load

Save As

OK

Cancel

Fig. 14B

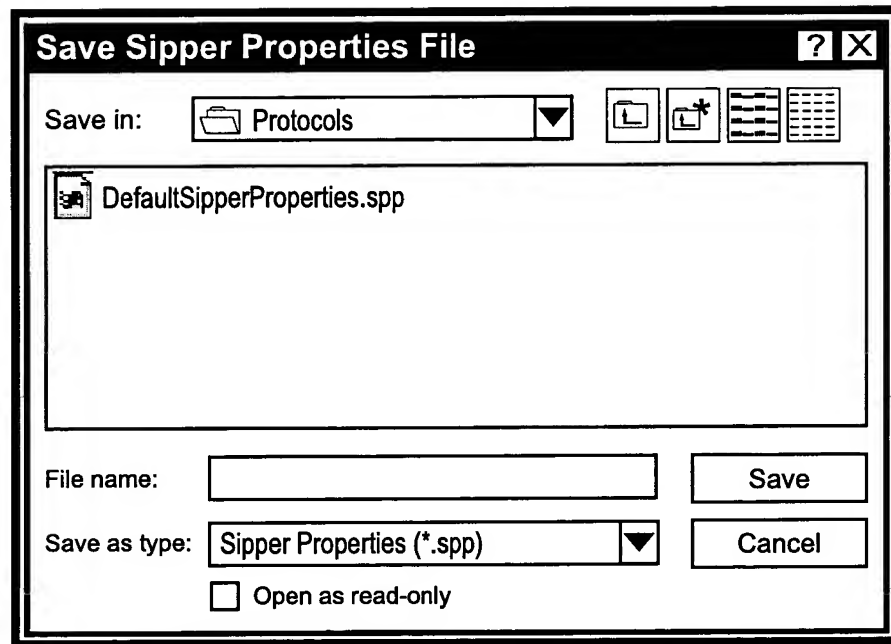


Fig. 14C